Claims

1. Automatic door or window system with a drive, preferably a sliding door drive, and with a displaceable driven wing, preferably a sliding wing or folding wing,

wherein the drive has the following components:

a fixedly mounted slide track, wherein the wing is preferably displaced in the slide track guided by cam rollers of at least one reel car,

an electric drive unit for driving the wing arranged on a fixedly mounted carrier, preferably on the slide track, or on a part connected therewith, having an electric drive motor,

as well as several electric functional units, for example, power supply units and/or locking devices and/or emergency power supply units, arranged on a fixedly mounted carrier, preferably on a slide track or on a part connected to the slide track,

characterized in that

a bus arrangement (4) is provided, which is configured for the transmission of data and signals between electric functional units and/or between electric functional units and the drive unit (31).

2. Automatic door or window system according to claim 1,

characterized in that the bus arrangement (4) is arranged on or in the slide track (72) or on a part connected to the slide track, for example, in a housing (7) of the drive.

3. Automatic door or window system according to claim 1

or 2,

characterized in that the bus arrangement (4) extends in the axial direction of the slide track (72) over a large part of the length of the slide track (72), preferably over the entire length of the slide track (72).

4. Automatic door or window system according to claims 1 to 3,

characterized in that the bus arrangement (4) is configured so that the electric functional units are optionally arranged in an axial position to the bus arrangement (4).

5. Automatic door or window system according to claim 1 to 4,

characterized in that the bus arrangement (4) has a ribbon cable.

6. Automatic door or window system according to one of the preceding claims,

characterized in that the slide track (72) has a profile housing which is rectangular or U-shaped or L-shaped in cross section, which is preferably configured as a box-shaped profile housing.

7. Automatic door or window system, according to one of the preceding claims,

characterized in that the slide track (72) or a part connected to the slide tract, for example, a housing (7) of the drive has a groove (41) for holding the bus arrangement (4).

8. Automatic door or window system, according to one of the preceding claims,

characterized in that at least one of the electric functional units has a clamping arrangement (5), preferably a suspended clamping arrangement (51) and/or a screwable clamping arrangement and/or a clippable clamping arrangement, for connecting the electric functional unit to the bus arrangement (4).

9. Automatic door or window system according to claim 8,

characterized in that the clamping arrangement (51) is configured on the electric functional unit (3) to be attached to or be one piece with said electric functional unit.

10. Automatic door or window system according to claim 8,

characterized in that the clamping arrangement (51) is configured separately and is connected via an electric cable to the electric functional unit (3).

11. Automatic door or window system, according to one of claims 8 to 10,

characterized in that the clamping arrangement (5) has at least one contacting dome, preferably several contacting domes (44a, 44b), which are automatically produced when the clamping arrangement (5) is mechanically attached to the bus arrangement (4).

12. Automatic door or window system, according to one of claims 8 to 11,

characterized in that the clamping arrangement (5) is configured so as to be asymmetric, preferably to provide a connection to the bus arrangement (4) which is free of polarity inversions.

13. Automatic door or window system, according to one of the preceding claims,

characterized in that the bus arrangement (4) has at least one electric line (43).

14. Automatic door or window system according to one of the preceding claims,

characterized in that the bus arrangement (4) has an elastic rubber-like isolation (42), in which the elastic line or the electric lines (43a, 43b) is or are guided.

15. Automatic door or window system, according to claim 14,

characterized in that the elastic rubber-like isolation (42) is configured to automatically cover an area of a contact point after the removal of a contacting domes (44a, b).

16. Automatic door or window system, according to one of the preceding claims,

characterized in that the bus arrangement (4) has a mechanic attachment fixture (6) for mechanically fixing electric functional units.

17. Automatic door or window system, according to claim

16,

characterized in that the clamping arrangement (5) is configured so that the electric connection to the bus arrangement (4) takes place simultaneously with the mechanical fixing of the electric functional units to the mechanic attachment fixture (6).

18. Automatic door or window system according to claim 16 or 17,

characterized in that the clamping arrangement (5) is configured as a part of the mechanical attachment fixture (6) or replaces said mechanical attachment fixture.

19. Automatic door or window system, according to one of the preceding claims,

characterized in that the bus arrangement (4) has a two-wire bus, for example, a CE bus or LON powerline, wherein it is preferably provided that the bus arrangement (4) for data and/or signals transmission and power supply is configured [sic] via the same electric lines.

20. Automatic door or window system, according to one of the preceding claims,

characterized in that the bus arrangement (4) has a three-wire bus or multiwire bus, preferably a CAN or ASI.

21. Automatic door or window system, according to one of the preceding claims,

characterized in that the bus arrangement (4) is configured for connection to a building control system,

for example, a EIB or LON.

22. Automatic door or window system, according to one of the preceding claims,

characterized in that the slide track (72) is configured so as to be electrically conducting and has a part of the bus arrangement (4), preferably the mass line and/or screening.

23. Automatic door or window system, according to one of the preceding claims,

characterized in that the bus arrangement (4) is configured for connection to electric functional units with and/or without their own intelligence.

24. Automatic door or window system, according to one of the preceding claims,

characterized in that at least one of the electric functional units has its own intelligence, preferably a microprocessor.

25. Automatic door or window system, according to one of the preceding claims,

characterized in that the electric drive unit (31) is configured as a bus master.

26. Automatic door or window system, according to one of the preceding claims,

characterized in that the electric drive unit (31) has an

electric control unit, preferably with a microprocessor, and at least one drive motor controlled by the control unit.

27. Automatic door or window system, according to one of the preceding claims,

characterized in that the electric drive unit (31) is configured for automatically recognizing and/or addressing and/or programming and/or initializing and/or inquiring connected electric functional units.

28. Automatic door or window system, according to claim 26 or 27,

characterized in that the control unit, preferably the microprocessor, is connected to the bus arrangement (4).

29. Automatic door or window system, according to one of claims 26 to 28,

characterized in that the control unit, preferably the microprocessor, coacts with the bus arrangement (4) and is configured for automatically recognizing and/or addressing and/or programming and/or initializing and/or inquiring electric functional units (3) connected to the bus arrangement (4).

30. Automatic door or window system, according to one of claims 26 to 29,

characterized in that at least one electric functional unit (3) has a response unit, preferably a microprocessor, which is configured so as to be automatically recognized and/or addressed and/or programmed and/or initialized and/or inquired.

31. Automatic door or window system, according to one of the preceding claims,

characterized in that an electric functional unit is configured as a redundant safety device for monitoring and/or replacing the control unit of the drive unit.

32. Automatic door or window system, according to one of the preceding claims,

characterized in that one or several of the electric functional units have their own monitoring device, which is preferably configured for the monitoring of the electric functional unit and/or for transmitting status messages and/or for transmitting error messages.

33. Automatic door or window system, according to one of the preceding claims,

characterized in that an electric functional unit is configured as an intelligent terminal field for connecting conventionally wired components, for example, an operating switch.

34. Automatic door or window system, according to one of the preceding claims,

characterized in that an electric functional unit is configured as a sensor device (32), preferably a motion sensor and/or photoelectric barrier.

35. Automatic door or window system, according to claim 34.

characterized in that the sensor device (32) is configured so as to be programmable and/or adjustable, preferably in that the sensitivity and/or the directional characteristic of the sensor device is programmable and/or adjustable.

36. Automatic door or window system, according to claim 34 or 35,

characterized in that the sensor device (32) is configured so as to be programmable and/or adjustable, preferably that the sensitivity and/or the directional characteristic of the sensor device (32) is programmable and/or adjustable via the bus arrangement (4).

37. Automatic door or window system, according to one of the preceding claims,

characterized in that an operating arrangement (36) is provided, which has a controller and is preferably arranged outside of the housing.

38. Automatic door or window system, according to claim 37,

characterized in that the operating arrangement (36) is configured for the connection to the bus arrangement (4).

39. ~~37~~. Automatic door or window system, according to claim 37 or 38,

characterized in that the operating arrangement (36) is configured for the adjustment and/or programming of parameters and/or modes of operation and/or display and/or storage of status messages and/or services data.

40. Automatic door or window system, according to one of the preceding claims,

characterized in that several functional units can be optionally selected or combined with each other to produce different embodiments of sliding door drives.

List of Reference Numerals

1 Wing
1a Fixed field wing
1b Fanlight wing
2 Sliding door drive
3 Component
31 Drive unit
32 Sensor device
33 Locking device
34 Emergency power supply unit
35 Power supply unit
36 Operating arrangement
4 Bus arrangement
41 Holding groove
42 Isolation
43a Conductor
43b Conductor
44a Contacting dome
44b Contacting dome
45 L profile
5 Clamping arrangement
51 System terminal
52a Clamp
52b Clamp
6 Mechanic attachment fixture
61 Attachment groove
62 Groove pads
63 Screw
7 Housing
71 Carrier element
71a Groove
71b Screw
72 Slide track profile
72a Slide track
73 Reel car
73a Cam roller
74 Suspending and adjusting device
75 Catch

76 Belt drive arrangement

77 Cover hood

9 Carrier